

## wDALI-2

# BT5 Long Range Transmitter - Receiver



## Datasheet

### Wireless DALI

Module for the wireless integration  
of spatially separated DALI ballasts  
in a DALI system



Art.Nr. 89453321-GRTM (Transmitter)

Art.Nr. 89453321-GRR (Receiver)

Art.Nr. 89453321-GRRPS (Receiver mit PS20)

# wDALI-2 BT5.0 Long Range Transmitter – Receiver wireless DALI

## Overview

- Module for the wireless integration of spatially separated DALI ballasts in a DALI system.
- At least one transmitter (sending unit) and one receiver (receiving unit) are required for the radio connection.
- Range of the wireless connection is up to 300m outdoors, 10m-20m inside buildings.
- Easy configuration with the DALI Cockpit Software and DALI USB interface.
- Broadcast commands and commands sent to groups assigned to the receiver are forwarded to the receiver subnet.
- Support of DALI-2 control commands.
- Commands are sent broadcast on the subnet.
- The transmitter is supplied from the main DALI line.
- Receiver variant Art.Nr. 89453321-GRR: supplied by the DALI power supply of the DALI sub-circuit.
- Receiver variant Art.Nr.: 89453321-GRRPS: is supplied by mains and provides a 20mA DALI bus power supply for the subnet.
- If more power is required, the DALI sub-circuit can be extended with a DALI Expander.
- Multiple DALI sub-circuits (each with a receiver) can be controlled with one transmitter.
- 2 sets of DALI terminals for easy connection - signal line can be looped through .

## Specification, Characteristics

Type	wDALI-2 BT5 Long Range Transmitter
article number	89453321-GRTM
<b>electrical data transmitter:</b>	
supply	DALI Bus
typ. current consumption	3.8 mA
input	DALI
function	Forwarding of DALI-commands via RF-connection
RF radio frequency range	BT5 Long Range
<b>technical data transmitter:</b>	
dimensions	59mmx33mmx15mm
mounting	back box installation
connecting wire cross-section	0.5 bis 1.5 mm <sup>2</sup>
storing and transportation temperature	-20°C...+75°C
operational ambient temperature	-20°C...+75°C
protection class	IP20

Type	wDALI-2 BT5 Long Range Receiver
article number	89453321-GRR

**electrical data receiver:**

supply	DALI Bus
typ. current consumption	3.8mA
input	DALI
function	receiving DALI-commands via RF group selection with DALI-Cockpit broadcast-forwarding of commands to selected group on DALI subnet
RF radio frequency range	BT5 Long Range

**technical data receiver:**

dimensions	59mmx33mmx15mm
mounting	back box installation
connecting wire cross-section	0.5 bis 1.5 mm <sup>2</sup>
storing and transportation temperature	-20°C...+75°C
operational ambient temperature	-20°C...+75°C
protection class	IP20

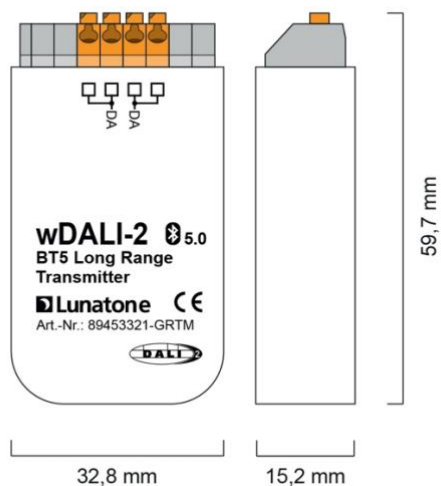
Type	wDALI-2 BT5 Long Range Receiver PS20
article number	89453321-GRRPS

**electrical data Receiver PS20:**

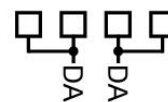
supply	210-250VAC / 50-60Hz
output	DALI, 20mA (für bis zu 10 Standard DALI-Lasten)
function	receiving DALI-commands via RF group selection with DALI-Cockpit broadcast-forwarding of commands to selected group on DALI subnet
RF radio frequency range	BT5 Long Range

**technical data Receiver PS20:**

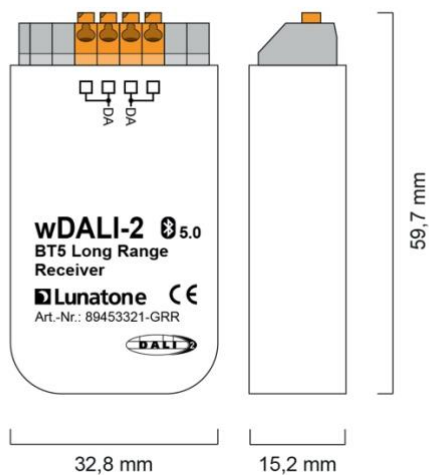
dimensions	59mmx33mmx15mm
mounting	back box installation
connecting wire cross-section	0.5 bis 1.5 mm <sup>2</sup>
storing and transportation temperature	-20°C...+75°C
operational ambient temperature	-20°C...+60°C
protection class	IP20



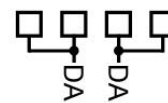
dimensions **wDALI-2 BT5 Long Range Transmitter**  
89453321-GRTM



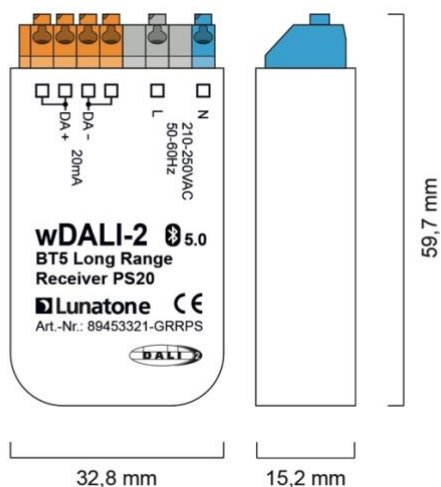
connection plan **wDALI-2 BT5 Long Range Transmitter**  
89453321-GRTM



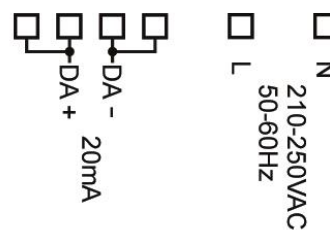
dimensions **wDALI-2 BT5 Long Range Receiver**  
89453321-GRR



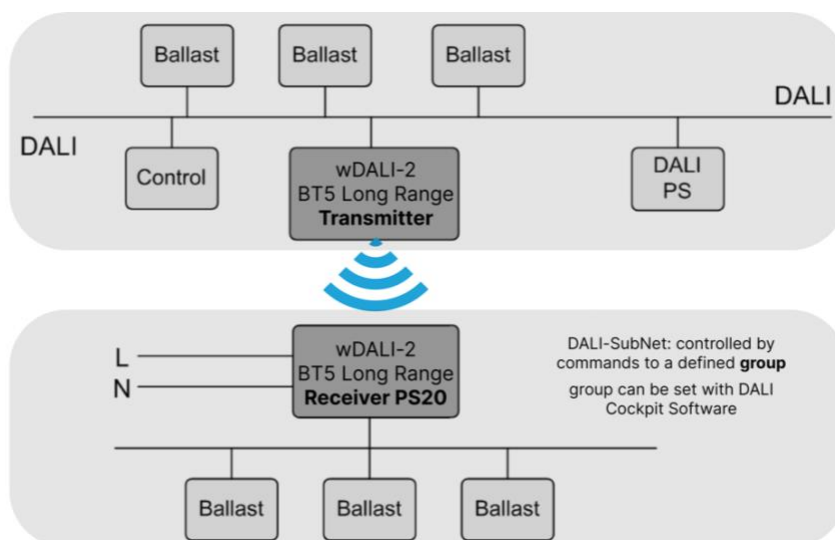
connection plan **wDALI-2 BT5 Long Range Receiver**  
89453321-GRR



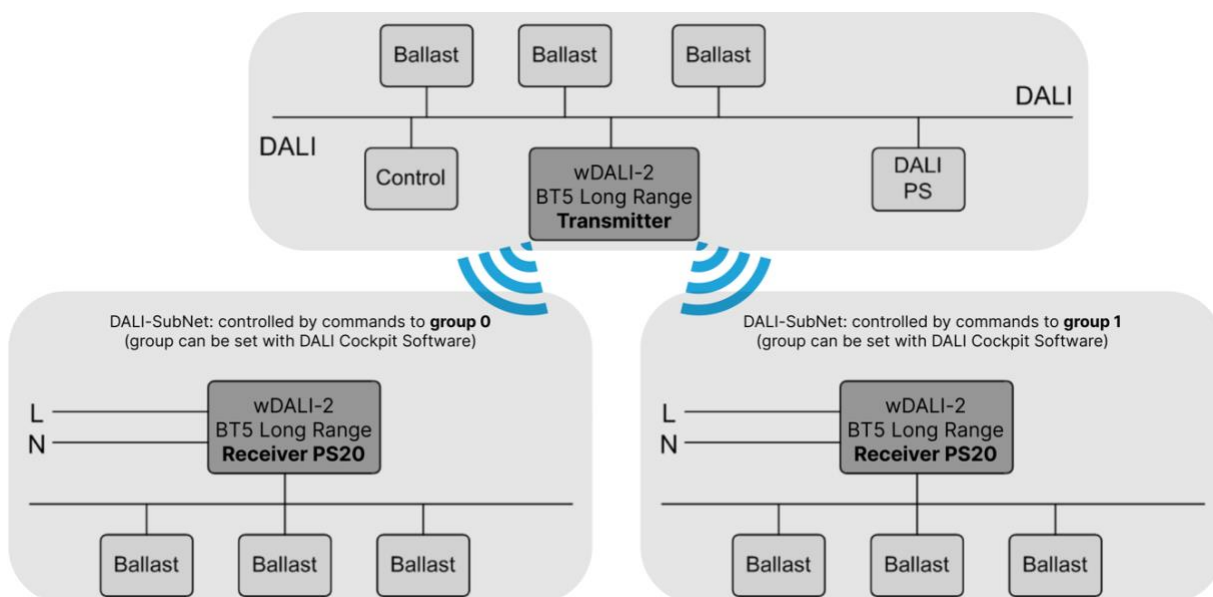
dimensions **wDALI-2 BT5 Long Range Receiver PS20**  
89453321-GRRPS



connection plan **wDALI-2 BT5 Long Range Receiver PS20** 89453321-GRRPS



Typical application: integration of spatially separated DALI-ballasts



Typical application: integration of multiple spatially separated areas, control via commands to group 0 and group 1

## Installation

The wDALI-2 BT5 Long Range Transmitter (Art.Nr.: 89453321-GRTM) as well as the wDALI-2 BT5 Long Range Receiver (Art.Nr.: 89453321-GRR) are connected directly to the DALI bus and also supplied by it (current consumption typical 3.8 mA).

The connection to the DALI terminals can be

made regardless of polarity, it is protected against overvoltages (mains voltage).

The wDALI-2 BT5 Long Range Receiver PS20 (item no. 89453321-GRR) is supplied from the mains and provides a 20mA DALI bus supply for the subnet.

If the power supply is insufficient, the sub-circuit can be extended with a DALI Expander.

There are two sets of DALI terminals for easy connection, the signal line can be looped through.

The range of the radio connection depends on the structural conditions, outside it is up to 300m, in buildings typically 10m-20m.

The DALI sub-circuit can be assigned to any of the 16 DALI groups (G0... G15). The group membership is set via the DALI Cockpit Software.

## Function

The wDALI-2 BT5.0 Long Range Transmitter and Receiver allows the integration of spatially separated DALI ballasts in a DALI-line without them being physically connected.

The DALI commands are transmitted via radio frequency, the receiver according to the setting of the group selector switch, and broadcasts are forwarded to the sub-circuit.

Only Broadcast commands and commands sent to the group assigned to the receiver are forwarded to the receiver subnet.

Scene values can be set with the PC Software tool DALI Cockpit.

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## Purchase Information

**Art. Nr. 89453321-GRTM:** wDALI-2 BT5 Long Range Transmitter, back box installation

**Art. Nr. 89453321-GRR:** wDALI-2 BT5 Long Range Receiver, back box installation

**Art. Nr. 89453321-GRRPS:** wDALI-2 BT5 Long Range Receiver PS20, integrated 20mA DALI bus power supply for the DALI subnet, back box installation

## Additional Information and Equipment

DALI Cockpit - free configuration software for DALI systems

<https://www.lunatone.com/en/product/dali-cockpit/>

Lunatone DALI products

<https://www.lunatone.com/en>

Lunatone Datenblätter und Manuals

<https://www.lunatone.com/en/download-s-a-z/>

## Contact

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## Disclaimer

Subject to change. Information provided without guarantee. The datasheet refers to the current delivery.

The function in installations with other devices must be tested for compatibility in advance.